

Claims

1. A sterilizer/disinfector for sterilizing or disinfecting an object, comprising:
a housing;
a light source disposed within the housing;
5 a light seal to block light output from the light source from exiting the housing,
wherein the object forms part of the light seal; and
an actuator, triggered by detection of completion of the light seal to a certain degree,
to enable light to be output from the light source.
- 10 2. The sterilizer/disinfector of claim 1, wherein the light source emits ultraviolet light.
3. The sterilizer/disinfector of claim 1, wherein the light output has a duration of less
than 10 milliseconds.
- 15 4. The sterilizer/disinfector of claim 1, wherein the light source is a flash lamp.
5. The sterilizer/disinfector of claim 1, wherein the light output is pulsed.
6. A method of sterilizing or disinfecting an object, comprising acts of:
20 introducing at least a first portion of the object into a sterilizer/disinfector;
sealing light within the sterilizer/disinfector using at least a second portion of the
object to form a light seal; and
automatically, upon detection of completion of the light seal to a certain degree,
flashing ultraviolet light onto the at least a first portion of the object within the
25 sterilizer/disinfector.
7. The method of claim 6, further including an act of killing microorganisms on the
object.
- 30 8. The method of claim 7, wherein the act of automatically flashing includes
automatically flashing ultraviolet light for a duration of less than one second.

9. The method of claim 7, wherein the act of automatically flashing includes automatically flashing ultraviolet light for a duration of less than 10 milliseconds.

5 10. The method of claim 7, wherein the act of automatically flashing includes automatically flashing pulsed ultraviolet light.

11. A sterilizer/disinfector, comprising:
a housing;
10 a flash lamp disposed within the housing; and
one or more vanes pivotally attached to the housing for actuating the flash lamp and blocking light emitted by the flash lamp from exiting the housing.

12. The sterilizer/disinfector of claim 11, further comprising a hinged door at each of
15 an entry point and exit point of the housing.

13. A method for sterilizing or disinfecting an object, comprising acts of:
continuously moving at least a portion of the object through a chamber including an ultraviolet light source;
20 actuating movement of a light seal, using the object; and
applying ultraviolet light to the at least a portion of the object, with an intensity sufficient to sterilize or disinfect the at least a portion of the object, as it moves past the ultraviolet light source.

25 14. The method of claim 13, wherein the act of applying includes applying ultraviolet light to the object automatically in response to a signal triggered by a position of the object.

15. The method of claim 13, wherein the act of continuously moving includes continuously moving at least a portion of a stethoscope through a chamber.

30 16. The method of claim 13, wherein the act of continuously moving includes

continuously moving at least a portion of a pulse oximeter through a chamber.

17. The method of claim 13, wherein the act of continuously moving includes continuously moving at least a portion of a device through a chamber, the device being
5 selected from the group consisting of a medical device, a dental device, and a hygienic device.

18. A sterilizer/disinfector for sterilizing or disinfecting an object, comprising:
a housing; and
10 two or more vanes pivotally mounted to the housing;
wherein the vanes may interface to enclose a portion of the object during sterilization or disinfection.

19. A method of sterilizing or disinfecting at least a portion of the object, comprising
15 acts of:
introducing the at least a portion of the object into a housing;
actuating rotation of two or more vanes pivotally mounted to the housing, using the object;
orienting the two or more vanes to form an opening when the object is at a
20 sterilization/disinfection position in which a portion of the object is located;
applying ultraviolet light to the object at the sterilization/disinfection position.

20. The method of claim 19, wherein the act of introducing includes introducing at least a portion of a stethoscope into a housing.

21. The method of claim 20, wherein the act of orienting includes orienting the two or more vanes to form a substantially circular opening.

22. The method of claim 19, wherein the act of orienting includes orienting the two or
30 more vanes to form an opening that is shaped to accommodate the object.

23. A device comprising:

a housing having an opening for at least partially receiving an object;

at least one movable member, attached to the housing, the at least one movable member movable between an open position and a closed position;

5 an ultraviolet light source within the housing; and

a detector that detects at least one of: (1) a degree of light sealing of the housing caused at least in part by the movable member, (2) the movable member being in the closed position, and (3) an object being located in a certain position at least partially within the housing;

10 wherein, when the object is placed at least partially within the housing, the movable member is in the closed position, and the detector detects the at least one of (1) a degree of light sealing of the housing caused at least in part by the movable member, (2) the movable member being in the closed position, and (3) an object being located in a certain position at least partially within the housing, then the ultraviolet light source emits ultraviolet radiation
15 to sterilize or disinfect the object.

24. A device as claimed in claim 23, wherein the movable member automatically moves to the closed position upon placing an object at least partially within the opening of the housing.

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25. A device comprising:

a housing having an opening for at least partially receiving an object;

at least one movable member, attached to the housing, the movable member movable between an open position and a closed position;

25 an ultraviolet light source within the housing; and

an actuator that prevents the ultraviolet light source from emitting ultraviolet radiation until an object is placed at least partially within the opening of the housing and the movable member is in its closed position.

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